# Obesity Prevention in Child Care Centers

#### **ISSUE:**

Approximately 1 in 6 of Michigan's preschoolers aged 2-5 were obese or overweight in 2010. Nationwide, over 64% of preschoolers with working families are in some form of child care, with those aged 3-6 spending an average of 24.8 hours per week in child care centers. In Michigan, there are approximately 4,500 licensed child care centers (capacity  $\approx 300,000$ ). Child care centers are, therefore, appropriate settings in which to combat childhood obesity through the following strategies: improved beverage regulations, physical activity standards and limiting screen time.

#### **PROPOSED ACTIONS:**

Establish state standards through licensing of child care centers to ensure that:

- Children ages 1-2 are served whole milk.
- Children older than two years are served 1% or skim milk.
- Clean, sanitary, self-serve drinking water is available throughout the day.
- 100% fruit juice intake is limited to one age-appropriate serving per day.
- Beverages with added sweeteners, whether artificial or natural, shall not be provided to children.
- All children ages 12 months or older attending a full-day program are provided 60 minutes of physical activity per day, a combination of both teacher-led and free play.
- Children are not seated for more than 30 minutes at a time except when eating or sleeping.
- While awake, infants cannot spend more than 30 minutes at a time in confining equipment.
- Child care providers are required to participate in physical activity and nutrition trainings.
- Television, DVD, video cassette, electronic games and computer viewing are prohibited for children younger than two years of age and limited for children two years of age and older to 60 minutes or less per day.

#### **RATIONALE:**

Contemporary dietary patterns suggest that milk intakes have declined while sugared beverage intakes (e.g., 100% juice, juice drinks, soda pop) have increased. This trend compromises nutrition: milk is an important source of calcium and Vitamin D and provides key nutrients for children's growth and development. In addition, simply replacing 6oz of 'juice drinks' with water daily could potentially prevent 11 lbs. of excess weight gain over the course of a year.

Increased physical activity is protective against obesity during the preschool-age period<sup>9</sup>. The National Association for Sports and Physical Activity recommends that all children from birth to age 5 should engage daily in physical activity that promotes movement skillfulness and foundations of health-related fitness<sup>10</sup>. Research has shown improvement is needed. One study, for example, found that up to 80% of time spent at daycare can be sedentary, with only 2-3% of physical activity classified as moderate or vigorous.

Young children in the United States watch an astonishing amount of television, spending more time in front of a screen than any other single activity except sleeping. One study indicates that over 31% of preschool children exceed the recommended limit for television viewing/screen time. Screen time can be described as the viewing of TV/video, computer, electronic games, hand-held devices or other visual devices. The American Academy of Pediatrics recommends no TV viewing before age 2 and that children over age 2 accumulate no more than 2 hours per day of television and video time.

# Obesity Prevention in Family and Group Child Care Homes

#### ISSUE:

Approximately 1 in 6 of Michigan's preschoolers aged 2-5 were obese or overweight in 2010. Nationwide, over 64% of preschoolers with working families are in some form of child care, with those aged 3-6 spending approximately 25 hours per week in family and group home care<sup>3</sup>. In Michigan, there are approximately 7,200 family and group child care homes (capacity  $\approx$  57,000). Family and group child care homes are, therefore, appropriate settings in which to combat childhood obesity through the following strategies: improved nutrition regulations, physical activity standards and limiting screen time.

#### **PROPOSED ACTIONS:**

Establish state standards through licensing of family and group child care homes to ensure that:

- Children older than two years are served 1% or skim milk.
- Clean, sanitary, self-serve drinking water is available throughout the day.
- 100% fruit juice intake is limited to one age-appropriate serving per day.
- Beverages with added sweeteners, whether artificial or natural, shall not be provided to children.
- Barriers to breastfeeding are reduced and that accommodations are in place to support the needs of breastfeeding mothers, infants, and families.
- All children are provided a minimum amount of physical activity per day, a combination of both teacher-led and free play.
- Children are not seated for more than 30 minutes at a time except when eating or sleeping.
- While awake, infants cannot spend more than 30 minutes at a time in confining equipment.
- Child care providers are required to participate in physical activity and nutrition trainings.
- Television, DVD, video cassette, electronic games and computer viewing are prohibited for children younger than two years of age and limited for children two years of age and older to 60 minutes or less per day.

## RATIONALE:

Contemporary dietary patterns suggest that milk intakes have declined while sugared beverage intakes (e.g., 100% juice, juice drinks, sports drinks, soda pop) have increased. This trend compromises nutrition: milk is an important source of calcium and Vitamin D and provides key nutrients for children's growth and development. In addition, simply replacing 60z of "juice drinks" with water daily could potentially prevent 11 lbs. of excess weight gain over the course of a year.

Breastfeeding offers proven health benefits, including a decreased risk of obesity in children. The American Academy of Pediatrics recommends that mothers breastfeed exclusively for six months and continue breastfeeding for at least the first year of a child's life. Women often find it difficult to continue breastfeeding once they return to the workplace and put their infant in childcare. Removing barriers to breastfeeding mothers and families in family and group child care homes is key to creating an ideal environment for infant feeding and may greatly increase the duration and exclusivity of breastfeeding mothers.

Increased physical activity is protective against obesity during the preschool-age period. The National Association for Sports and Physical Activity recommends that all children from birth to age 5 should engage daily in physical activity that promotes movement skillfulness and foundations of health-related fitness. Research has shown that improvement is needed. One study, for example, found that up to 80% of time spent at daycare can be sedentary, with only 2-3% of physical activity classified as moderate or vigorous.

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#### **Obesity Prevention Starts in Infancy:**

Advance policy to create environments where women who choose to breastfeed are able to meet their breastfeeding goals and barriers to breastfeeding are reduced resulting in increased initiation, duration and exclusivity breastfeeding rates.

#### ISSUE:

The American Academy of Pediatrics (AAP) states human milk is uniquely superior for infant feeding and recommends breastfeeding as the optimal source of nutrition for children through the first year of life. Breastfeeding provides many benefits for mothers and babies including protection against disease and reduced rates of obesity. Data also indicates breastfeeding decreases annual health care costs, increases work place productivity and decreases environmental burden and energy demand. Breastfeeding is also a unique issue that aligns with two key health indicators on the Governor's Health and Wellness Dashboard - obesity and infant mortality.

While the evidence for human milk feeding is clear, many infants are not receiving breast milk as recommended. Michigan mothers initiate and continue breastfeeding at rates below the national average. Of further concern, Michigan is one of only five states that do not offer statutory protection for breastfeeding mothers. In an effort to provide normal and optimal nutrition for our children, it is important to reduce the social, structural, and environmental barriers to breastfeeding that mothers encounter.

Research has identified breastfeeding as a potentially critical strategy in reducing the risk of obesity in children. Studies have shown that infants who have never been breastfed are at higher risk for later childhood obesity than infants who have ever been breastfed. Breastfeeding as an obesity prevention strategy is recognized by major health organizations and governmental agencies, such as the Centers for Disease Control and Prevention, the AAP and the Institute of Medicine and is an important approach to tackling obesity in Michigan's youngest citizens.

#### **PROPOSED ACTIONS:**

- Issue a policy clarification to educate Medicaid providers on circumstances in which lactation services, counseling and equipment will be reimbursed.
- Encourage health benefit plans and other insurers to reimburse for lactation services and equipment.
- Work with health professional organizations, educational institutions, and licensing boards to enhance rules and curriculums related to breastfeeding promotion and lactation support including evidence based knowledge, skills and attitudes.
- Revise state standards through licensing of Family and Group Child Care Homes to ensure optimal support for breastfeeding mothers, infants and families.

#### RATIONALE:

A recent systematic review of breastfeeding research conducted by the Agency for Healthcare Research and Quality reports exclusive breastfeeding appears to have an even stronger effect than combining breastfeeding with formula feeding. Infants who have never been breastfed are at a higher risk for later childhood obesity than infants who have been breastfed. In addition, increased breastfeeding duration is associated with lower rates of childhood obesity. In order to achieve the AAP recommendation of "only breast milk" for the first six months, barriers must be lessened and support for breastfeeding families must be increased. Optimal breastfeeding, as recommended by major medical organizations, contributes to normal growth and improved child health outcomes. Policy and research aimed to improve breastfeeding exclusivity and duration rates, especially among populations at risk for obesity, are essential components of a comprehensive obesity prevention strategy. Breastfeeding, exclusive and sustained, is one of the most easily modifiable and cost-effective obesity prevention strategies available.

# Body Mass Index in the Michigan Care Improvement Registry:

Height, weight, and BMI capabilities should be integrated to the MCIR through a change to the governing administrative rules that allows voluntary use by health care providers.

#### **ISSUE:**

Leading policy, academic, and advocacy groups have highlighted the urgent need for high quality surveillance data to permit understanding childhood obesity prevalence and trends at the local level and for populations at highest risk. Such information is needed to determine the effectiveness of community-level interventions and identify where additional resources should be focused. Michigan's addition of a Body Mass Index (BMI) Growth Module to its registry could be a model for other states seeking cost-effective strategies to monitor obesity. When fully populated, this data will ultimately allow for the evaluation of state and local policies, childhood obesity prevention programs, and the prioritization and effective design of future obesity prevention efforts. To address provider needs, the module also offers tools to help providers screen all children ages 0 to 18 for obesity, those at risk of obesity, identify weight-related health risks, and focus prevention and treatment counseling on patient-driven goals.

The Michigan Care Improvement Registry (MCIR) has been created and refined by the Michigan Legislature to monitor and improve the Michigan Department of Community Health's (MDCH) response to other challenging public health threats. The MCIR has proved an effective tool for childhood health promotion and offers strategic advantages for childhood obesity prevention efforts in Michigan.

#### **PROPOSED ACTIONS:**

- Complete programming for the MCIR BMI Growth Module's reporting capabilities to be used at the provider, clinic, health plan, region and state level.
- Modify governing statutes and regulations to facilitate providers voluntary reporting of children's height and weight data.
- Prepare communication strategies to roll the MCIR BMI Growth Module out statewide to health care providers and MCIR users.
- Once BMI related data is entered, assess data quality and assessment of obesity-related care quality.

#### **RATIONALE:**

The MCIR is a robust and established public health surveillance tool currently used to monitor immunization status and other child health issues. A vast majority of physicians (85-90%) in the state already use this system to track the immunization and lead screening status of their pediatric patients. Adding BMI-related data fields to the MCIR will provide an opportunity for improvements in evidence-based community and policy interventions, and medical and public health practices. This addition will improve data sources for policy and program evaluation so that scarce resources will be more efficiently allocated to improve prevention and clinical management efforts.

# <u>Michigan Complete Streets & Safe Routes to School and School</u> Transportation and Infrastructure Management

Supporting state and local Complete Streets policy change, and encouraging active transportation throughout school transportation and facility management decisions

#### **ISSUE:**

Obesity rates among children have skyrocketed in recent years. One of the factors contributing to childhood obesity is physical inactivity. Obese children generally become obese adults and suffer from chronic, and often preventable, diseases such as cardiovascular disease, diabetes, and several types of cancer. One of the strategies used to combat obesity is to create safe places for families and children to participate in physical activity.

By being active and choosing healthy foods, individuals can decrease their risk of developing chronic diseases. Children should get at least 60 minutes of physical activity every day. Often community design, transportation infrastructure, and man-made land use (i.e. the built environment) make it difficult to integrate physical activity into a daily routine by walking or biking to work or school, run errands, or reach a variety of other destinations. To encourage children and families to be physically active, it is essential that the built environment offer opportunities for active transportation and physical activity. There are many ways a community creates built environments that support physical activity, including but not limited to:

- *Complete Streets* efforts that recognize the importance of planning, designing, constructing, and maintaining roadways to accommodate safe access for all users.
- School transportation and infrastructure management which can encourage the consideration of active transportation throughout decisions regarding the siting, closure, and consolidation of school facilities for providing safe and efficient connections for students, staff, and the community.

#### **PROPOSED ACTIONS:**

- Support Complete Streets policy at the state and local level through training and resources.
- Assist the Complete Streets Advisory Council.
- Support the Vulnerable Roadway Users bills (HBs 4685 & 4686) that enhance penalties for reckless drivers who injure or kill a bicyclist, pedestrian or assistive device user.
- Improve bicyclist and pedestrian safety by enhancing Michigan's driver's education curriculum and other resource materials to include more information on sharing roadways with bicyclists and pedestrians.
- Advance policy that enables school districts and local communities to consider active transportation when making school transportation and infrastructure management decisions such as siting, closure, and consolidation of school facilities.

#### **RATIONALE:**

It is difficult for children and families to make physical activity a part of their daily lives when the built environment in which they live does not support healthy behaviors. By supporting Complete Streets policy changes at the state and local level, and strategically targeting specific policies affecting school facility management decisions we can change the fabric of our communities and create built environments that support physical activity.

# **Obesity Prevention in Michigan Schools**

Advocate for policies that prevent obesity utilizing the coordinated school health model, with emphasis on physical education, health education, comprehensive school physical activity programs, and nutrition standards.

#### ISSUE:

The academic success of Michigan's youth is strongly linked with their health. Research has found that when a student is hungry, physically or emotionally abused, or suffering from chronic illness, poor school performance can follow. Risky health behaviors such as substance abuse, violence, poor nutrition, and physical inactivity often affect school attendance, grades, test scores, and the ability to pay attention in class, leading to academic failure. It follows then that academic success is an excellent indicator of overall well-being for youth and a good predictor of adult health outcomes. Reducing childhood obesity is a vital public health goal that can significantly impact the success of our young people and the financial health of our state.

The Michigan State Board of Education (SBE) recognizes this vital connection and has adopted 16 health-related policies in the last decade. While all of the SBE adopted policies provide school districts with effective tools on the path to positive change, the policies are recommendations rather than requirements, so implementation is inconsistent across Michigan's school districts.

Childhood obesity trends are alarming. In Michigan 30.6% of children were overweight or obese in 2009. In 2008 the estimated medical cost of obesity in Michigan was \$3.1 billion. School nutrition and physical activity policies and practices, and teaching children the skills needed to develop healthy habits can make a difference.

To reverse the trend of childhood obesity among Michigan youth Healthy Kids, Healthy Michigan adopted the policy statement above that includes the following components:

#### Coordinated School Health:

Coordinated School Health Councils provide a framework for school districts to leverage community partners and resources to meet the needs of students and families. Through this model, schools are better able to maximize resources, eliminate duplication of efforts, and increase the effectiveness of programs and services. Forty-nine percent (49%) of Michigan elementary schools and 61% of secondary schools have a team that offers guidance on school health policies and coordinates school health activities. However, there is a great deal of variability in their approaches and overall effectiveness. Standardizing the constituency of these Councils and their purpose, establishing assessment options and reporting requirements, and providing technical assistance will allow for more strategic and effective efforts to improve the health and academic outcomes for Michigan students.

# **Proposed Actions:**

- Amend the Revised School Code (RSC) to require the existence of District Coordinated School Health Councils.
- Authorize the Michigan Department of Education to establish mechanisms for the development, review, update, and reporting of annual school health action plans.

#### Obesity Prevention in Michigan Schools continued

#### Health Education:

Health literacy is correlated with healthy behaviors and educational achievement. Michigan's RSC requires health education be provided, but is silent on important details governing the quantity and quality. Because school districts are not required to report on educational outcomes of health education courses, there is a continuing trend to reduce the time and effort students spend learning this academic subject. National guidelines recommend a minimum of 40 hours of instructional time in health education for early elementary grades and 80 hours for third grade and beyond in order to affect attitudes and practices. Adding specificity to the Michigan RSC pertaining to the quantity and quality of health education will ensure the regular instruction of health skills necessary to foster healthy decisions and behaviors throughout the lifespan.

#### **Proposed Actions:**

- Amend the Michigan RSC to separate and improve expectations for health education.
- Require a minimum amount of time be spent in health education courses at grade levels K-8.

### Physical Education and Comprehensive School Physical Activity Programs (CSPAP):

Michigan's RSC requires physical education be provided, but is silent on important details governing the quantity and quality. National guidelines state that 150 minutes of instruction in physical education should be provided to elementary students and 225 minutes for middle school students. Adding specificity to the RSC will ensure regular student instruction and physical activity opportunities necessary for a lifetime of health and activity. The benefits of physical activity extend beyond health to have a positive effect on academic performance. In addition to quality physical education students need additional opportunities to reach the recommended 60 minutes of physical activity per day. Schools can promote physical activity before, during, and after school, involve staff, and facilitate family and community engagement through comprehensive school physical activity programs.

#### **Proposed Actions:**

- Amend the Michigan RSC to separate and improve expectations for physical education.
- Require a minimum amount of time be spent in physical education courses at grade levels K-8.
- Require schools to implement a comprehensive school physical activity program that includes five components: 1) quality physical education, 2) physical activity during school, 3) physical activity before and after school, 4) staff involvement, 5) family and community engagement.
- Disallow the application of extra-curricular activities towards physical education requirements.

#### **Nutrition Standards:**

Research demonstrates that having policies in place to improve the nutritional quality of food and beverages offered and sold in schools positively affects student dietary intake. Foods and beverages are available throughout the school campus in a number of venues including school meals, vending machines, school stores, a la carte and snack lines, parties and celebrations, extracurricular events, and as incentives or rewards for academic achievement or good behavior. Since students often spend the majority of their day at school, a significant amount of their food intake occurs at school. The food and beverages available to students should therefore be nutrient rich and enhance their ability to succeed academically.

#### **Proposed Actions:**

- Enact legislation to ensure all Michigan school districts implement nutrition standards that meet or exceed the *Michigan Nutrition Standards* adopted by the State Board of Education as well as standards set by the United States Department of Agriculture.
- Promote regional trainings, the implementation toolkit, and other resources available for all Michigan school districts on adoption of *Michigan's Nutrition Standards*.